The Diagnostic Problem of Cephalalgia

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• Cephalalgia, a common complaint, often presents both a diagnostic and a therapeutic problem. In a significant number of cases the cause may be traced to allergic sensitivity. "Allergic headache" is no different from other allergic diseases either as to the factors that produce the head pain or as to the specific treatment required. Taking a careful history and carrying out definitive skin testing may lead to diagnosis in cases that otherwise might be considered functional.

PATIENTS WITH A COMPLAINT of headache have been the object of considerable interest and concern for many years, for although cephalalgia may be a symptom of disease such as hypertension, meningitis or nephritis, in the great majority of cases it cannot be related to an organic condition and the symptom itself is the problem. After decades of common usage, the term *migraine* now encompasses most of this group and the cephalalgia is characterized by periodicity with symptom-free intervals. A variety of other secondary symptoms may occur, but none (except perhaps nausea and vomiting) with significant frequency.

Many investigators who postulate various causes of cephalalgia of the migraine type attempt to apply their beliefs to all cases. Wolff[21] expressed the belief that the pain derived from dilatation of the branches of the external carotid artery, and he advised treatment by psychiatric management with symptomatic support. Alvarez[2] felt that the condition is essentially functional and recommended the same therapeutic approach. Tice[17] attributed the condition to stress and adrenal depletion and felt that supportive measures and psychotherapy were indicated. Horton[11] reported upon a kind of cephalalgia he considered of a different order in that it occurred in brief episodes characterized by hemicrania, unilateral vasodilatation, lacrimation and sweating. The episodes could be induced with injections of histamine, he said, and effectively treated by "histamine desensitization." Later Horton reported upon application of the treatment to a large group of persons with periodic cephalalgia and concluded that the treatment was neither specific nor curative but did have a place among prophylactic measures. The actual existence of the kind of headache described by Horton has been questioned,[18] and Beckman[4] said that "those who attempt to treat migraine through desensitization of the patient to histamine do not understand the fundamental principles of allergy."

Many texts mention a type of cephalalgia that is related to muscular strain and imbalance and that responds to orthopedic management. Reports of clinical observations indicate that there are certain cases in which headache is a manifestation of hypoglycemia and in these cases relief is obtained by management of the underlying disturbance. In some cases migraine is closely related to nasal symptoms and the pain may be described as originating in the sinuses. It is difficult to establish a clear distinction between head pain caused by disease of the sinuses and head pain originating outside the sinuses. Cases in which there is frontal or maxillary involvement with local pain and tenderness fall into the category of sinusitis and are most often so treated unless other symptoms suggest other relationships. It is also rather unsatisfactory to relate acute episodes of pain to infection. Alexander[1] pointed out that often infected sinuses cause neither local pain nor headache.

Since attempts at classification of cases of periodic pain in the head seem only to confuse, it would seem better, until the subject becomes less benighted, to consider the condition as a single entity.

Although the etiologic possibilities in cephalalgia or migraine are many, specific diagnosis often cannot be made. Perhaps the most valuable diagnostic tool is a careful and detailed history which considers every aspect of the symptoms, a thorough analysis of the periodicity and a determination of various precipitating factors.

In some cases the complaints and the pattern of attacks indicate a close relationship to the allergic state. The occurrence of migraine due to hypersensitivity has been known for many years, but it has not received the emphasis which its frequency warrants. As early as 1883 Strumpell[20] referred to migraine as "an exudative process comparable to urticaria and angioneurotic edema." Vaughan[19] was one of the first to report cases of migraine caused by allergic reaction. Miller and Raulston[14] suggested that migraine was a manifestation of anaphylaxis and they

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obtained encouraging results with injections of peptone. Riley[16] made a comprehensive review of reports on the subject of migraine and was impressed by the fact that relatively conservative investigators reported allergic factors in a high proportion of cases. Ball,[3] investigating 1,000 cases of allergic disease, found notation of migraine in the family history in 261 cases. In an analysis of 1,000 cases of cephalalgia, Hersh[10] noted that 537 patients had a diagnosis of rhinitis, and in those cases allergic sensitivity was the most common causative factor. Kennedy[13] described several cases of severe headache which were not only episodic but were accompanied by focal neurological signs, giant urticaria and angioneurotic edema. Crowe[7] reported the case of a young man with episodes of hemicrania, drowsiness, nausea and vomiting. Such episodes could be precipitated by the ingestion of wheat and could be arrested by administration of epinephrin. Goltman[8] reported upon a patient in whom severe hemicrania could be induced by ingestion of wheat and who had an opening in the skull through which the development of cerebral edema during an intentionally induced attack could be observed.

ALLERGENS OTHER THAN FOODS

Although early investigators considered food as the only important allergen in the production of migraine, more recent reports show that any antigenic substance may be incriminated. Feathers and animal hairs are known to play an important part.[5] Failures with changes in diet led Goltman[9] to desensitize patients to pollens and environmental factors, with good results. A case in which migraine was precipitated by an injection of pollen extract was noted by Cooke.[6] Ogden[15] tested and treated patients with a potent extract of house dust with excellent results. He, too, observed that an overdose of the antigen used in treatment could precipitate an attack of migraine.

In an investigation of the allergic factor in migraine, the author made a study of 90 consecutive cases, observed in private practice, in which the patients had problems of cephalalgia. (Not included were patients seen in consultation and advised that the cause of their headache was other than allergic.) Headache was the major symptom in all instances. The location of the pain and the descriptions of the nature of the pain varied widely; there appeared to be no significant incidence of particular site or specific kind. Unvarying hemicrania was present in only 15 cases. Thirty-one of the patients were males and 59 females. The age range was from 4 to 60 years but the majority were between 30 and 50 years of age when first observed. It was difficult to determine precisely the age of onset but it seemed that the headaches began most often at the end of the second decade and the beginning of the third decade of life. Other forms of allergic disease were noted in 67 of 90 patients. Included were rhinitis, asthma, colitis and allergic dermatosis. In 57 cases there was a family history of allergic disease, including migraine. In seven cases the family history of allergic disease was of migraine alone.

Nausea and vomiting, which were complained of by 41 patients, were the most common of the associated symptoms. Twenty-three patients observed nasal blockage as directly related, although this by no means indicated that the pain was localized in a sinus. Twelve complained of photophobia, ten of vertigo and thirteen of scotomata, while only three noted the occurrence of a visual aura preceding the attack. Only one patient observed unilateral flush and sweating as in the condition described by Horton. Clinical relationship of specific excitants to cephalalgia was noted in 12 of the 90 cases reviewed and in nine cases a specific food was identified as the excitant. In nine other cases the pain in the head was either entirely seasonal in type or of perennial type with seasonal exacerbation. Complete skin testing was done in 80 cases, and in the ten cases in which it was not it was so obvious that the allergenic agent was an inhalant that only pollens and environmental materials were investigated. Of the 80 completely tested, none had reaction to foods alone and in none was there more intense reaction to a food than to an inhalant. Only 40 of the completely tested patients had any reaction to foods. Forty reacted only to inhalants. Many of the patients mentioned symptoms of allergic import in connection with the principal complaint of cephalalgia. Seasonal factors were implicated as often as foods, and the results of skin testing also seemed to indicate that allergens other than foods are important factors in the allergic type of cephalalgia.

The frequency with which allergic sensitivities were associated with cephalalgia and the rather high incidence of allergic disease in the family history of patients with principal complaint of pain in the head supports the observation that allergic sensitivity is a factor in some cases of cephalalgia.

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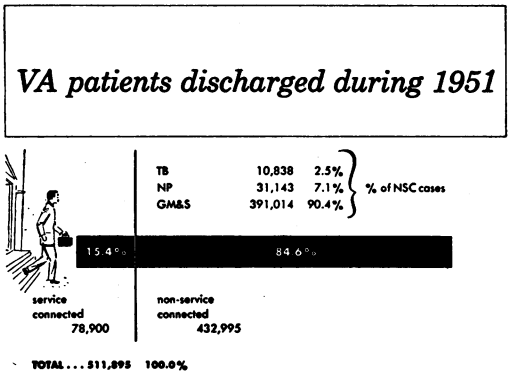
In Viewing the VA Medical Program . . .



Of 511,895 patients discharged from VA hospitals in 1951, only 15.4% were treated for illnesses or injuries incurred as a result of military service. Physicians believe it is unsound to continue authorization of "free" lifetime medical care for those who suffer no mishap while in uniform, while other citizens with no military background must pay their own way.